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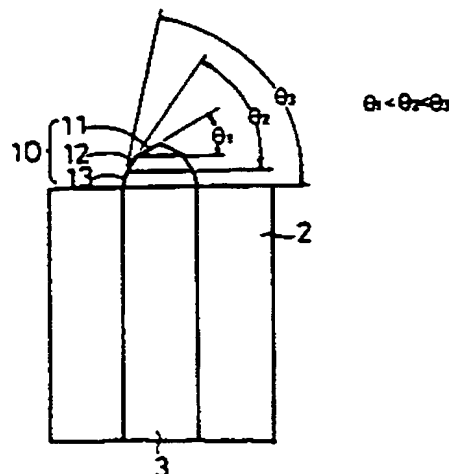
APPLICATION DATE : 17-09-88
APPLICATION NUMBER : 63231473

APPLICANT : ANRITSU CORP;

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TITLE : OPTICAL FIBER HAVING MICROLENS
AND ITS PRODUCTION



ABSTRACT : **PURPOSE:** To decrease the return of reflected light without increasing coupling efficiency too much by forming a microlens to a circular conical shape of multiple steps and stepwise changing the angles of inclination of the outer side faces of the respective steps according to the height of the lens.

CONSTITUTION: The uppermost outer side face 11 is formed to the angle θ_1 of inclination, the next outer side face 12 likewise to θ_2 and the lowermost outer side face 13 likewise to θ_3 when the microlens 10 is formed to the circular conical shape of 3 steps. The microlens is so constituted as to attain the relation. The reflection at the fiber top can be decreased without impairing the coupling efficiency and misalignment tolerance when the optical fiber is constituted in such a manner. The return light to a light emitting element is decreased in this way and contribution can be made to the stable operation of the light emitting element.

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